

**IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF SOUTH CAROLINA  
CHARLESTON DIVISION**

<b>ORREL MANUEL and CAROLYN MANUEL</b>	)	
	)	
<b>Plaintiffs</b>	)	<b>MDL NO: 2873</b>
	)	<b>Master Docket No.: 218-mn-2873</b>
	)	
<b>v.</b>	)	<b>JUDGE RICHARD GERGEL</b>
	)	
<b>THE 3M COMPANY, f/k/a MINNESOTA</b>	)	<b>Civil Action No: 2:20-cv-235-RMG</b>
<b>MINING AND MANUFACTURING CO.,</b>	)	
<b>TYCO FIRE PRODUCTS, L.P.,</b>	)	<b>COMPLAINT AND</b>
<b>SUCCESSOR IN INTEREST TO THE</b>	)	<b>JURY DEMAND</b>
<b>ANSUL COMPANY, BUCKEYE FIRE</b>	)	
<b>EQUIPMENT CO., CHEMGUARD,</b>	)	
<b>NATIONAL FOAM, INC.,L.L.C., E. I. DU</b>	)	
<b>PONT DE NEMOURS &amp; CO., THE</b>	)	
<b>CHEMOURS COMPANY, L.L.C.,</b>	)	
<b>ARKEMA, INC., DOWDUPONT, INC.,</b>	)	
<b>KIDDE-FENWAL, INC.,</b>	)	
<b>KIDDE, P.L.C., INC., UTC FIRE &amp; SECURITY)</b>	)	
<b>AMERICAS CORPORATION, INC.,</b>	)	
<b>UNITED TECHNOLOGIES CORPORATION,</b>	)	
<b>CHUBB FIRE, LTD.,</b>	)	
	)	
<b>Defendants.</b>	)	

**COMPLAINT**

Plaintiffs, Orrel Manuel ("Plaintiff") and Carolyn Manuel, by and through the undersigned counsel, allege upon information and belief, as follows:

**NATURE OF THE ACTION**

1. Aqueous Film Forming Foam ("AFFF ") is a specialized substance designed to extinguish petroleum-based fires. It has been used for decades, and continues to be used, by military firefighters to put out fires and in training and response exercises in preparation for fires.

2. AFFF contains synthetic, toxic per- and polyfluoroalkyl substances collectively

known as “PFAS.”<sup>1</sup> PFAS bind to proteins in the blood of animals and humans exposed to such materials and not only remain and persist over long periods of time, but, due to their unique chemical structure, accumulate and build up in the blood/body of the exposed individuals with each additional exposure, no matter how small. PFAS can travel long distances, move through soil, seep into groundwater, or be carried through air.

3. Defendants collectively designed, marketed, developed, manufactured, distributed, released, trained users, produced instructional materials, sold and/or otherwise handled and/or used AFFF with knowledge that it contained highly toxic and long lasting PFASs, which would contaminate Plaintiff’s blood and/or body with PFAS, and the resultant biopersistence and bioaccumulation of such PFAS in the blood and/or body of Plaintiff.

4. As a result, Plaintiff Orrel Manuel was exposed to AFFF containing PFAS and suffered severe personal injuries as a result.

5. This action is brought by Plaintiffs Orrel Manuel and Carolyn Manuel for injunctive, equitable, and declaratory relief for injuries arising from the intentional, knowing, reckless and/or negligent acts and/or omissions of Defendants in connection with contamination of the blood and/or body of Plaintiff Orrel Manuel with PFAS through the design, marketing, development, manufacture, distribution, release, training, and sale of AFFF containing PFAS.

## JURISDICTION AND VENUE

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<sup>1</sup>“ PFAS” includes but is not limited to: perfluorooctanoic acid (“PFOA”) and perfluorooctane sulfonic acid (“PFOS”) and related chemicals, including but not limited to those that degrade to PFOA and/or PFOS, and including but not limited to C3-C-15 PFAS chemicals, such as perfluorohexanesulfonate (PFHxS), perfluorononanoate (PFNA), perfluorobutanesulfonate (PFBS), perfluorohexanoate (PFHxA), perfluoroheptanoate (PFHpA), perfluoroundecanoate (PFUnA), perfluorododecanoate (PFDxA), HFPA Dimer Acid (CAS # 13252 -13- 6/C3 Dimer Acid/P-08-508/FRD903/GX903/C3DA/GenX), and HFPA Dimer Acid Ammonium Salt (CAS#62037-80-3/ammonium salt of C3 Dimer Acid/P-08-509/FRD902/GX903/GenX)

6. This Court has jurisdiction over the subject matter of this Complaint, pursuant to 28 U.S.C. §1332(a), as the parties are completely diverse in citizenship and the amount in controversy exceeds \$75,000.

7. Venue is proper in this District pursuant to this Court's CMO 3. Plaintiffs state that but for the Order permitting direct filing in the United States District Court for the District of South Carolina, Plaintiffs would have filed this Complaint in the United States District Court of Utah. Further, in accordance with CMO 3, Plaintiffs hereby designate the United States District Court of Utah. as the "Home Venue" as this case may have originally been filed there. Venue is proper in the United States District Court of Utah pursuant to 28 U.S.C. § 1391 because it is the judicial district in which a substantial part of events or omissions giving rise to the claims occurred, and Defendants conduct business within this district.

### **PARTIES**

8. Plaintiff Orrel Manuel is a resident and citizen of Buckeye, Maricopa County, Utah. Plaintiff brings this action due to personal injuries sustained as a result of exposure to Defendants' AFFF containing PFAS.

9. Plaintiff Carolyn Manuel is a resident and citizen of Buckeye, Maricopa County, Utah.

10. Defendant, 3M Company, f/k/a Minnesota Mining and Manufacturing Company, ("3M"), is a Delaware corporation and does business throughout the United States, including conducting business in Utah. 3M has its principal place of business at 3M Center, St. Paul, Minnesota 55133.

11. 3M designed, marketed, developed, manufactured, distributed released, trained users, produced instructional materials, sold and/or otherwise handled and/or used AFFF

containing PFAS that are used in firefighting training and response exercises which are the subject of this Complaint, including in Utah, in such a way as to result in the contamination of Plaintiff's blood and/or body with PFAS, and the biopersistence and bioaccumulation of such PFAS in his blood and/or body.

12. Defendant Tyco Fire Products, L.P., successor in interest to The Ansul Company ("Tyco"), is a Delaware corporation and does business throughout the United States, including conducting business in Utah. Tyco has its principal place of business at One Stanton Street, Marinette, Wisconsin 54143. Tyco manufactured and currently manufactures the Ansul brand of products, including Ansul brand AFFF containing PFAS.

13. Tyco is the successor in interest to the corporation formerly known as The Ansul Company ("Ansul"). At all times relevant, Tyco/Ansul designed, marketed, developed, manufactured, distributed released, trained users, produced instructional materials, sold and/or otherwise handled and/or used AFFF containing PFAS that are used in firefighting training and response exercises which are the subject of this Complaint, including in Utah, in such a way as to result in the contamination of Plaintiff's blood and/or body with PFAS, and the biopersistence and bioaccumulation of such PFAS in his blood and/or body.

14. Defendant Buckeye Fire Equipment Company ("Buckeye") is a North Carolina corporation and does business throughout the United States, including conducting business in Utah. Buckeye has its principal place of business at 110 Kings Road, Mountain, North Carolina 28086.

15. Buckeye designed, marketed, developed, manufactured, distributed released, trained users, produced instructional materials, sold and/or otherwise handled and/or used AFFF containing PFAS that are used in firefighting training and response exercises which are the subject

of this Complaint, including in Utah, in such a way as to result in the contamination of Plaintiff's blood and/or body with PFAS, and the biopersistence and bioaccumulation of such PFAS in his blood and/or body.

16. Defendant Chemguard is a Wisconsin corporation and does business throughout the United States, including conducting business in Utah. Chemguard has its principal place of business at One Stanton Street, Marinette, Wisconsin 54143.

17. Chemguard designed, marketed, developed, manufactured, distributed released, trained users, produced instructional materials, sold and/or otherwise handled and/or used AFFF containing PFAS that are used in firefighting training and response exercises which are the subject of this Complaint, including in Utah, in such a way as to result in the contamination of Plaintiff's blood and/or body with PFAS, and the biopersistence and bioaccumulation of such PFAS in his blood and/or body.

18. Defendant National Foam, Inc. ("National Foam") is a Delaware corporation and does business throughout the United States, including conducting business in Utah. National Foam has its principal place of business at 350 East Union Street, West Chester, Pennsylvania 19382.

19. National Foam designed, marketed, developed, manufactured, distributed released, trained users, produced instructional materials, sold and/or otherwise handled and/or used AFFF containing PFAS that are used in firefighting training and response exercises which are the subject of this Complaint, including in Utah, in such a way as to result in the contamination of Plaintiff's blood and/or body with PFAS, and the biopersistence and bioaccumulation of such PFAS in his blood and/or body.

20. Defendant, E. I. du Pont de Nemours & Co. ("DuPont"), is a Delaware corporation and does business throughout the United States, including conducting business in Utah. DuPont

has its principal place of business at 1007 Market Street, Wilmington, Delaware 19898.

21. DuPont designed, marketed, developed, manufactured, distributed, released, trained users, produced instructional materials, sold, and/or otherwise handled and/or used AFFF containing PFAS that are the subject of this Complaint, including in Utah, in such a way as to result in the contamination of Plaintiff's and/or body with PFAS, and the biopersistence and bioaccumulation of such PFAS in his blood and/or body.

22. Defendant, The Chemours Company, L.L.C. ("Chemours"), is a Delaware corporation and does business throughout the United States, including conducting business in Utah. Chemours has its principal place of business 1007 Market Street, Wilmington, Delaware 19898.

23. Chemours designed, marketed, developed, manufactured, distributed, released, trained users, produced instructional materials, sold, and/or otherwise handled and/or used AFFF containing PFAS that are the subject of this Complaint, in such a way as to result in the contamination of Plaintiff's blood and/or body with PFAS, and the biopersistence and bioaccumulation of such PFAS in his blood and/or body.

24. Defendant, Arkema, Inc., is a Pennsylvania corporation and does business throughout the United States, including conducting business in Utah. Arkema, Inc. has its principal place of business at 900 1st Avenue, King of Prussia, Pennsylvania 19406.

25. Arkema, Inc., designed, marketed, developed, manufactured, distributed, released, trained users, produced instructional materials, sold, and/or otherwise handled and/or used AFFF containing PFAS that are the subject of this Complaint, including in Utah, in such a way as to result in the contamination of Plaintiff's blood and/or body with PFAS, and the biopersistence and bioaccumulation of such PFAS in his blood and/or body.

26. Defendant, DowDuPont, Inc. (“DowDuPont”), is a Delaware corporation and does business throughout the United States, including conducting business in Utah. DowDuPont, has its principal place of business at 974 Centre Road, Wilmington, Delaware 19805 and 2211 H.H. Dow Way, Midland, Michigan 48674.

27. DowDuPont designed, marketed, developed, manufactured, distributed, released, trained users, produced instructional materials, sold, and/or otherwise handled and/or used AFFF containing PFAS that are the subject of this Complaint, including in Utah, in such a way as to result in the contamination of Plaintiff’s blood and/or body with PFAS, and the biopersistence and bioaccumulation of such PFAS in his blood and/or body.

28. Defendant Kidde-Fenwal, Inc. (“Kidde-Fenwal”) is a corporation organized under the laws of the State of Delaware and does business throughout the United States, including conducting business in Utah. Kidde-Fenwal has its principal place of business at One Financial Plaza, Hartford, Connecticut 06101. Kidde-Fenwal is the successor-in-interest to Kidde Fire Fighting, Inc. (f/k/a Chubb National Foam, Inc. f/k/a National Foam System, Inc.) (collectively, “Kidde/Kidde Fire”).

29. Kidde-Fenwal designed, marketed, developed, manufactured, distributed, released, trained users, produced instructional materials, sold, and/or otherwise handled and/or used AFFF containing PFAS that are the subject of this Complaint, including in Utah, in such a way as to result in the contamination of Plaintiff’s blood and/or body with PFAS, and the biopersistence and bioaccumulation of such PFAS in his blood and/or body.

30. Defendant Kidde P.L.C., Inc. (“Kidde P.L.C.”) is a foreign corporation organized and existing under the laws of the State of Delaware, and does business throughout the United States, including conducting business in Utah. Kidde P.L.C. has its principal place of business at

One Carrier Place, Farmington, Connecticut 06034. Upon information and belief, Kidde PLC was formerly known as Williams Holdings, Inc. and/or Williams US, Inc.

31. Kidde P.L.C. designed, marketed, developed, manufactured, distributed, released, trained users, produced instructional materials, sold, and/or otherwise handled and/or used AFFF containing PFAS that are the subject of this Complaint, including in Utah, in such a way as to result in the contamination of Plaintiff's blood and/or body with PFAS, and the biopersistence and bioaccumulation of such PFAS in his blood and/or body.

32. Defendant UTC Fire & Security Americas Corporation, Inc. (f/k/a GE Interlogix, Inc.) ("UTC") is a North Carolina corporation and does business throughout the United States, including conducting business in Utah. UTC has principal place of business at 3211 Progress Drive, Lincolnton, North Carolina 28092. Upon information and belief, Kidde-Fenwal, Inc. is part of the UTC Climate Control & Security unit of United Technologies Corporation.

33. UTC designed, marketed, developed, manufactured, distributed, released, trained users, produced instructional materials, sold, and/or otherwise handled and/or used AFFF containing PFAS that are the subject of this Complaint, including in Utah, in such a way as to result in the contamination of Plaintiff's blood and/or body with PFAS, and the biopersistence and bioaccumulation of such PFAS in his blood and/or body.

34. Defendant United Technologies Corporation ("United Technologies") is a foreign corporation organized and existing under the laws of the State of Delaware, and does business throughout the United States, including conducting business in Utah. United Technologies has its principal place of business at 8 Farm Springs Road, Farmington, Connecticut 06032.

35. United Technologies designed, marketed, developed, manufactured, distributed, released, trained users, produced instructional materials, sold, and/or otherwise handled and/or



used AFFF containing PFAS that are the subject of this Complaint, including in Utah, in such a way as to result in the contamination of Plaintiff's blood and/or body with PFAS, and the biopersistence and bioaccumulation of such PFAS in his blood and/or body.

36. Defendant Chubb Fire, Ltd. ("Chubb") is a foreign private limited company, with offices at Littleton Road, Ashford, Middlesex, United Kingdom TW15 1TZ. Upon information and belief, Chubb is registered in the United Kingdom with a registered number of 134210. Upon information and belief, Chubb is or has been composed of different subsidiaries and/or divisions, including but not limited to, Chubb Fire & Security Ltd., Chubb Security, PLC, Red Hawk Fire & Security, LLC, and/or Chubb National Foam, Inc.

37. Chubb designed, marketed, developed, manufactured, distributed, released, trained users, produced instructional materials, sold, and/or otherwise handled and/or used AFFF containing PFAS that are the subject of this Complaint, including in Utah, in such a way as to result in the contamination of Plaintiff's blood and/or body with PFAS, and the biopersistence and bioaccumulation of such PFAS in his blood and/or body.

38. When reference is made in this Complaint to any act or omission of any of the Defendants, it shall be deemed that the officers, directors, agents, employees, or representatives of the Defendants committed or authorized such act or omission, or failed to adequately supervise or properly control or direct their employees while engaged in the management, direction, operation, or control of the affairs of Defendants, and did so while acting within the scope of their duties, employment or agency.

39. The term "Defendant" or "Defendants" refers to all Defendants named herein jointly and severally.

### **GENERAL FACTUAL ALLEGATIONS**

40. AFFF is a mixture of chemicals, including PFAS, used to put out petroleum-based fuel and other flammable liquid fires. AFFF lowers surface tension of the fuel, which starves a fire of its oxygen supply. While the fluorinated compounds in AFFF work well to extinguish fires, they are not biodegradable. These toxic chemicals accumulate and contaminate the bodies of animals and humans who come in contact with or consume them.

41. Defendants designed, marketed, developed, manufactured, distributed, released, trained users, produced instructional materials, sold, and/or otherwise handled AFFF containing toxic PFAS that were used at hundreds of military bases around the country, including Hill Air Force Base in Utah.

42. Defendants have each designed, marketed, developed, distributed, sold, manufactured, released, trained users on, produced instructional materials for, and/or otherwise handled and/or used AFFF containing PFAS, including in Utah, in such a way as to cause the contamination of Plaintiff's blood and/or body with PFAS, and the resultant biopersistence and bioaccumulation of such PFAS in the blood and/or body of Plaintiff.

43. Prior to commercial development and large-scale manufacture and use of AFFF containing PFAS, no such PFAS had been found, detected, or were present in human blood.

44. By at least the end of the 1960s, animal toxicity testing performed by Defendants manufacturing and/or using PFAS indicated that exposure to such materials, including at least PFOA, resulted in various adverse health effects among multiple species of laboratory animals, including toxic effects to the liver, testes, adrenals, and other organs and bodily systems.

45. By at least the end of the 1960s, additional research and testing performed by Defendants manufacturing and/or using PFAS indicated that such materials, including at least PFOA, because of their unique chemical structure, were resistant to environmental degradation

and would persist in the environment essentially unaltered if allowed to enter the environment.

46. By at least the end of the 1970s, additional research and testing performed by Defendants manufacturing and/or using PFAS indicated that one or more such materials, including at least PFOA and PFOS, because of their unique chemical structure, would bind to proteins in the blood of animals and humans exposed to such materials where such materials would not only remain and persist over long periods of time but would accumulate and build up in the blood/body of the exposed individuals with each additional exposure, no matter how small.

47. Defendants manufacturing and/or using AFFF containing PFAS released such PFAS into the environment during, as a result of, or in connection with their manufacturing and other commercial operations, including into the air, surface waters, ground water, soils, landfills, and/or through their involvement and/or participation in the creation of consumer or other commercial products and materials and related training and response and instructional materials and activities, including in Utah, that Defendants knew, foresaw, and/or reasonably should have known and/or foreseen would expose Plaintiff to such PFAS.

48. By at least the end of the 1970s, Defendants manufacturing and/or using PFAS, including at least DuPont and 3M, were aware that PFAS, including at least PFOA and PFOS, had been detected not only in the blood of workers at PFAS manufacturing facilities, but in the blood of the general population of the United States in people not known to be working at or living near PFAS manufacturing and/or use facilities, indicating to such Defendants that continued manufacture and use of such PFAS materials would inevitably result in continued and increased levels of PFAS getting into the environment and into human blood across the United States, even in areas nowhere near or associated with specific PFAS manufacturing or use facilities.

49. By at least the end of the 1980s, additional research and testing performed by

Defendants manufacturing and/or using PFAS indicated that at least one such PFAS, PFOA, had caused Leydig cell (testicular) tumors in a chronic cancer study in rats, resulting in at least one such Defendant, DuPont, classifying such PFAS internally as a confirmed animal carcinogen and possible human carcinogen.

50. It was understood by Defendants by at least the end of the 1980s that a chemical that caused cancer in animal studies must be presumed to present a cancer risk to humans, unless the precise mechanism of action by which the tumors were caused was known and it was known that such mechanism of action would not be operative and/or occur in humans.

51. By at least the end of the 1980s, scientists had not determined the precise mechanism of action by which any PFAS caused tumors and thus prevailing scientific principles of carcinogenesis classification mandated that Defendants presume any such PFAS material that caused tumors in animal studies could present a potential cancer risk to exposed humans.

52. By at least the end of the 1980s, additional research and testing performed by Defendants manufacturing and/or using PFAS, including at least DuPont, indicated that elevated incidence of certain cancers and other adverse health effects, including elevated liver enzymes and birth defects, had been observed among workers exposed to such materials, including at least PFOA, but such data was not published, provided to governmental entities as required by law, or otherwise publicly disclosed at the time.

53. By at least the end of the 1980s, Defendants, including at least 3M and DuPont, understood that, not only did these PFAS, including at least PFOA and PFOS, get into and persist and accumulate in human blood and in the human body, but that once in the human body and blood, particularly the longer-chain PFAS, such as PFOS and PFOA, had a long half-life, meaning that they would take a very long time (years) before even half of the material would start to be

eliminated (assuming no further exposures), which allowed increasing levels of the chemicals to build up and accumulate in the blood and/or body of exposed individuals over time, particularly if any level of exposures continued.

54. By at least the end of the 1990s, additional research and testing performed by Defendants manufacturing and/or using PFAS, including at least 3M and DuPont, indicated that at least one such PFAS, PFOA, had caused a triad of tumors (Leydig cell (testicular), liver, and pancreatic) in a second chronic cancer study in rats.

55. By at least the end of the 1990s, the precise mechanism(s) of action by which any PFAS caused each of the tumors found in animal studies had still not been identified, mandating that Defendants continue to presume that any such PFAS that caused such tumors in animal studies could present a potential cancer risk to exposed humans.

56. By at least 2010, additional research and testing performed by Defendants manufacturing and/or using PFAS, including at least 3M and DuPont, revealed multiple potential adverse health impacts among workers exposed to such PFAS, including at least PFOA, such as increased cancer incidence, hormone changes, lipid changes, and thyroid and liver impacts, which such Defendants' own scientists, lawyers, and advisors recommended be studied further to assess the extent to which PFAS exposures were causing those effects.

57. When the United States Environmental Protection Agency ("USEPA") and other state and local public health agencies and officials first began learning of PFAS exposures in the United States and potential associated adverse health effects, Defendants repeatedly assured and represented to such entities and the public that such exposures presented no risk of harm and were of no legal, toxicological, or medical significance of any kind.

58. After USEPA and other entities began asking Defendants to stop manufacturing

and/or using certain PFAS, Defendants began manufacturing and/or using and/or began making and/or using more of certain other and/or “new” PFAS, including PFAS materials with six or fewer carbons, such as GenX (collectively “Short-Chain PFAS”).

59. Defendants manufacturing and/or using Short-Chain PFAS, including at least DuPont and 3M, are aware that one or more such Short-Chain PFAS materials also have been found in human blood.

60. By at least the mid-2010s, Defendants, including at least DuPont and Chemours, were aware that at least one Short-Chain PFAS had been found to cause the same triad of tumors (Leydig (testicular), liver, and pancreatic) in a chronic rat cancer study as had been found in a chronic rat cancer study with a non-Short-Chain PFAS.

61. As of today’s date, the precise mechanism(s) of action by which any PFAS causes each of the tumors found in animal studies has(ve) not been identified, mandating that Defendants presume that any such PFAS that caused such tumors in animal studies be presumed to present a potential cancer risk to exposed humans.

62. Research and testing performed by and/or on behalf of Defendants making and/or using Short-Chain PFAS indicates that such Short-Chain PFAS materials present the same, similar, and/or additional risks to human health as had been found in research on other PFAS materials, including cancer risk.

63. Nevertheless, Defendants repeatedly assured and represented to governmental entities and the public (and continue to do so) that the presence of PFAS, including these Short-Chain PFAS, in human blood at the levels found within the United States presents no risk of harm and is of no legal, toxicological, or medical significance of any kind.

64. As of today’s date, Defendants, through their membership in the FluoroCouncil,

represent to the public through the FluoroCouncil website that: “The newer, short-chain chemistries currently in use are well studied [and] ... [t]he science supports the conclusion that the newer FluoroTechnology is not expected to present a significant risk to humans and the environment.”

65. At all relevant times, Defendants, individually and/or collectively, have had the resources and ability but have intentionally, purposefully, recklessly, and/or negligently chosen not to fund or sponsor any study, investigation, testing, and/or other research of any kind of the nature Defendants claim is necessary to confirm and/or prove that the presence of any one and/or combination of PFAS in human blood causes any disease and/or adverse health impact of any kind in humans, presents any risk of harm to humans, and/or is of any legal, toxicological, or medical significance to humans, according to standards Defendants deem acceptable.

66. Even after an independent science panel, known as the “C8 Science Panel,” publicly announced in the 2010s that human exposure to 0.05 parts per billion or more of one PFAS, PFOA, in drinking water for one year or more had “probable links” with certain human diseases, including kidney cancer, testicular cancer, ulcerative colitis, thyroid disease, preeclampsia, and medically-diagnosed high cholesterol, Defendants repeatedly assured and represented to governmental entities, their customers, and the public (and continue to do so) that the presence of PFAS in human blood at the levels found within the United States presents no risk of harm and is of no legal, toxicological, or medical significance of any kind, and have represented to and assured such governmental entities, their customers, and the public (and continue to do so) that the work of the independent C8 Science Panel was inadequate to satisfy the standards of Defendants to prove such adverse effects upon and/or any risk to humans with respect to PFAS in human blood.

67. At all relevant times, Defendants shared and/or should have shared among themselves all relevant information relating to the presence, biopersistence, and bioaccumulation of PFAS in human blood and associated toxicological, epidemiological, and/or other adverse effects and/or risks.

68. As of the present date, blood serum testing and analysis by Defendants, independent scientific researchers, and/or government entities has confirmed that PFAS materials are clinically demonstrably present in approximately 99% of the current population of the United States.

69. There is no naturally-occurring “background,” normal, and/or acceptable level or rate of any PFAS in human blood, as all PFAS detected and/or present in human blood is present and/or detectable in such blood as a direct and proximate result of the acts and/or omissions of Defendants.

70. Data exists to indicate that the presence, accumulation, toxic invasion, and/or persistence of PFAS in human blood, including that of Plaintiff, is injurious and physically harmful and results in unwanted, unconsented-to, and deleterious alterations, changes, and/or other presently-existing physical injury and/or adverse impacts to the blood and/or body of Plaintiff, including but not limited to subcellular injuries, including but not limited to biopersistence and bioaccumulation within the body.

71. At all relevant times, Defendants, through their acts and/or omissions, controlled, minimized, trivialized, manipulated, and/or otherwise influenced the information that was published in peer-review journals, released by any governmental entity, and/or otherwise made available to the public relating to PFAS in human blood and any alleged adverse impacts and/or risks associated therewith, effectively preventing Plaintiff from discovering the existence and extent of any injuries/harm as alleged herein.



72. At all relevant times, Defendants, through their acts and/or omissions, took steps to attack, challenge, discredit, and/or otherwise undermine any scientific studies, findings, statements, and/or other information that proposed, alleged, suggested, or even implied any potential adverse health effects or risks and/or any other fact of any legal, toxicological, or medical significance associated with the presence of PFAS in human blood.

73. At all relevant times, Defendants, through their acts and/or omissions, concealed and/or withheld information from their customers, governmental entities, and the public that would have properly and fully alerted Plaintiff to the legal, toxicological, medical, or other significance and/or risk from having any PFAS material in his blood.

74. At all relevant times, Defendants encouraged the continued and even further increased use and release into the environment of PFAS, including into Utah, by their customers and others, including but not limited to through manufacture, use, and release, of AFFF containing PFAS and/or emergency responder protection gear or equipment coated with materials made with or containing PFAS, and tried to encourage and foster the increased and further use of PFAS, including in Utah, in connection with as many products/uses/and applications as possible, despite knowledge of the toxicity, persistence, and bioaccumulation concerns associated with such activities.

75. Once governmental entities and regulators began learning of the potential toxicity, persistence, and bioaccumulation concerns associated with PFAS, Defendants cited to the pervasive use of such PFAS throughout numerous sectors of the American economy (which they had intentionally and purposefully encouraged and created) and the widespread presence of PFAS in blood of Americans (which they also had negligently, recklessly, and/or intentionally caused) as an excuse and/or reason not to restrict or regulate PFAS, essentially arguing that the issues

associated with PFAS had become “too big to regulate.”

76. To this day, Defendants deny that the presence of any PFAS in human blood, at any level, is an injury or presents any harm or risk of harm of any kind, or is otherwise of any legal, toxicological, or medical significance.

77. To this day, Defendants deny that any scientific study, research, testing, or other work of any kind has been performed that is sufficient to suggest to the public that the presence of any PFAS material in human blood, at any level, is of any legal, toxicological, medical, or other significance.

78. Defendants, to this day, affirmatively assert and represent to governmental entities, their customers, and the public that there is no evidence that any of the PFAS found in human blood across the United States causes any health impacts or is sufficient to generate an increased risk of future disease sufficient to warrant diagnostic medical testing, often referring to existing studies or data as including too few participants or too few cases or incidents of disease to draw any scientifically credible or statistically significant conclusions.

79. Defendants, to this day, use and rely upon what they claim is this same “lack of definitive evidence of causation” as between any PFAS and any adverse human health effect to oppose and try to discourage regulatory and/or legislative efforts to limit, restrict, and/or address PFAS impacts to the environment or human health, and to oppose, reject, and deny claims that PFAS has caused any injury or increased the risk of any adverse human health effects.

80. Yet, to this day, Defendants knowingly, willfully, purposefully, intentionally, recklessly, and/or negligently refuse to fund or conduct any scientific study, research, testing, and/or other work of any kind that is extensive or comprehensive enough, according to Defendants, to generate results that Defendants will accept (outside the context of an existing written settlement

agreement such as DuPont entered with respect to certain PFOA exposures, which created the C8 Science Panel) as sufficient to confirm a causal connection between any single or combination of PFAS in human blood and any injury, human disease, adverse human health impact, and/or a risk sufficient to warrant any personal injury compensation or future diagnostic medical testing, including medical monitoring.

81. Defendants were and/or should have been aware, knew and/or should have known, and/or foresaw or should have foreseen that their marketing, development, manufacture, distribution, release, training and response of users, production of instructional materials, sale and/or other handling and/or use of AFFF containing PFAS, including in Utah, would result in the contamination of the blood and/or body of Plaintiff with PFAS, and the biopersistence and bioaccumulation of such PFAS in his blood and/or body.

82. Defendants were and /or should have been aware, or knew and/or should have known, and/or foresaw or should have foreseen that allowing PFAS to contaminate the blood and/or body of Plaintiff would cause injury, irreparable harm, and/or unacceptable risk of such injury and/or irreparable harm to Plaintiff.

83. Defendants did not seek or obtain permission or consent from Plaintiff before engaging in such acts and/or omissions that caused, allowed, and/or otherwise resulted in Plaintiff's exposure to AFFF and the contamination of Plaintiff's blood and/or body with PFAS materials, and resulting biopersistence and bioaccumulation of such PFAS in his blood and/or body.

#### **PLAINTIFF ORREL MANUEL'S EXPOSURE TO AFFF**

84. For decades, the air force has stored and used AFFF containing PFAS in firefighter training and response exercises at Hill Air Force Base in northern Utah. The AFFF containing

PFAS, which was designed, manufactured, marketed, distributed and/or sold by Defendants, was expected to, and did, reach the Hill Air Force Base in Utah, without substantial change in the condition in which it was sold to the Air Force.

85. The descriptive labels and data sheets for the AFFF containing PFAS utilized at Hill Air Force Base did not reasonably nor adequately describe the hazards of AFFF containing PFAS. Defendants knew or should have known of these hazards when the product was distributed. Defendants manufactured, designed, marketed, distributed, and/or sold the AFFF knowing that the PFAS contained in the AFFF presented an unreasonable risk to human health and are inherently dangerous.

86. Plaintiff Manuel Orrel worked as a firefighter at Hill Air Force Base in Utah for approximately thirty-one years. During this time, he used AFFF containing PFAS in firefighting training and response exercises, and used equipment/gear treated and/or coated with materials containing and/or contaminated with one or more PFAS. Plaintiff Orrel Manuel was exposed to AFFF containing PFAS numerous times over the course of his career, and now has one or more PFAS materials in his blood serum.

87. On approximately February 1, 2018, Plaintiff Orrel Manuel was diagnosed with cancer. Plaintiff suffered, and continues to suffer, the effects attendant thereto, as a direct and proximate result of the unreasonably dangerous and defective nature of Defendant's wrongful and negligent conduct in the design, engineering, manufacture, development, fabrication, testing, release, training and response of users, production of informational materials, handling, selling, use, and/or distribution of AFFF containing PFAS.

## **CAUSES OF ACTION**

### **COUNT I** **Negligence**

88. Plaintiffs hereby incorporate by reference the allegations contained in the preceding paragraphs of this Complaint as if restated in full herein.

89. Defendants had a duty to exercise reasonable care in their design, engineering, manufacture, development, fabrication, testing, release, training and response of users, production of informational materials, handling, selling, use, and/or distribution of the inherently dangerous AFFF containing PFAS, including a duty of care to ensure that PFAS did not infiltrate, persist in, and accumulate in the blood and/or body of Plaintiff.

90. Defendants owed a duty of care towards Plaintiff that was commensurate with the inherently dangerous, harmful, injurious, bio-persistent, environmentally-persistent, toxic, and bio-accumulative nature of PFAS.

91. Defendants failed to exercise ordinary care by acts and/or omissions that permitted, allowed, and/or otherwise resulted in the contamination of, persistence in, and accumulation in the blood and/or body of Plaintiff with one or more PFAS, including all such acts and/or omissions referenced in this Complaint, resulting in Plaintiff having one or more PFAS in his blood.

92. Defendants knew, foresaw, anticipated, and/or should have foreseen, anticipated, and/or known that the design, engineering, manufacture, fabrication, sale, release, training and response of users, production of informational materials, handling, use, and/or distribution of AFFF containing PFAS and/or other acts and/or omissions as described in this Complaint could likely result in the contamination of the blood and/or body of Plaintiff and its persistence and accumulation in his blood and/or body.

93. Despite knowing, anticipating, and/or foreseeing the bio-persistent, bio-accumulative, toxic, and/or otherwise harmful and/or injurious nature of AFFF containing PFAS, Defendants, their agents, servants, and/or employees, committed negligent acts and/or omissions

that resulted in the contamination of the blood and/or body of Plaintiff with one or more PFAS materials, and the biopersistence and bioaccumulation of such PFAS in his blood and/or body.

94. Defendants, through their acts and/or omissions as described in this Complaint, breached their duty to Plaintiff.

95. It was reasonably foreseeable to Defendants that Plaintiff would likely suffer the injuries and harm described in this Complaint by virtue of Defendants' breach of their duty and failure to exercise ordinary care, as described herein.

96. But for Defendants' negligent and/ or gross negligent acts and/or omissions, Plaintiff would not have been injured or harmed.

97. Defendants' negligent conduct was the direct and proximate cause of the injuries and harm to Plaintiff, as described herein.

**COUNT II**  
**Battery**

98. Plaintiffs hereby incorporate by reference the allegations contained in the preceding paragraphs of this Complaint as if restated in full herein.

99. At all relevant times, Defendants possessed knowledge that the AFFF containing PFAS which they designed, engineered, manufactured, fabricated, sold, handled, released, trained users on, produced instructional materials for, used, and/or distributed were bio-persistent, bio-accumulative, toxic, potentially carcinogenic, and/or otherwise harmful/injurious and that their continued manufacture, use, sale, handling, release, and distribution would result in Plaintiff having PFAS in his blood, and the biopersistence and bioaccumulation of such PFAS in his blood.

100. However, despite possessing such knowledge, Defendants knowingly, purposefully, and/or intentionally continued to engage in such acts and/or omissions, including but not limited to all such acts and/or omissions described in this Complaint, that continued to result

in Plaintiff accumulating PFAS in his blood and/or body, and such PFAS persisting and accumulating in his blood and/or body.

101. Defendants did not seek or obtain permission or consent from Plaintiff to put or allow PFAS materials into his blood and/or body, or to persist in and/or accumulate in his blood and/or body.

102. Entry into, persistence in, and accumulation of such PFAS in Plaintiff's body and/or blood without permission or consent is an unlawful and harmful and/or offensive physical invasion and/or contact with Plaintiff's persons and unreasonably interferes with Plaintiff's rightful use and possession of Plaintiff's blood and/or body.

103. At all relevant times, the PFAS present in the blood of Plaintiff originated from Defendants' acts and/or omissions.

104. Defendants continue to knowingly, intentionally, and/or purposefully engage in acts and/or omissions that result in the unlawful and unconsented-to physical invasion and/or contact with Plaintiff that results in persisting and accumulating levels of PFAS in his blood.

105. Plaintiff, and any reasonable person, finds the contact at issue harmful and/or offensive.

106. Defendants acted intentionally with the knowledge and/or belief that the contact, presence and/or invasion of PFAS with, onto and/or into Plaintiff's blood serum, including its persistence and accumulation in such serum, was substantially certain to result from those very acts and/or omissions.

107. Defendants' intentional acts and/or omissions resulted directly and/or indirectly in harmful contact with Plaintiff's blood and/or body.

108. The continued presence, persistence, and accumulation of PFAS in the blood and/or

body of Plaintiff is offensive, unreasonable, and/or harmful, and thereby constitutes a battery.

109. The presence of PFAS in the blood and/or body of Plaintiff has altered the structure and/or function of such blood and/or body parts and resulted in cancer.

110. As a direct and proximate result of the foregoing acts and omissions, Plaintiff suffered and continues to suffer physical injury for which Defendants are therefore liable.

**COUNT III**  
**Inadequate Warning**

111. Plaintiffs hereby incorporate by reference the allegations contained in the preceding paragraphs of this Complaint as if restated in full herein.

112. Defendants knew or should have known: (a) exposure to AFFF containing PFAS was hazardous to the environment and to human health; (b) the manner in which they were designing, manufacturing, marketing, distributing, and selling AFFF containing PFAS was hazardous to human health; and (c) the manner in which they were manufacturing, marketing, distributing, and selling AFFF containing PFAS would result in the contamination of Plaintiff's blood and/or body as a result of exposure.

113. Defendants had a duty to warn of the hazards associated with AFFF containing PFAS entering and poisoning the blood and/or body of Plaintiff because they knew of the dangerous, hazardous, toxic, and poisonous properties of AFFF containing PFAS. Defendants failed to provide sufficient warning to purchasers that the use of their AFFF products would cause PFAS to be released into Plaintiff and cause the exposure and bioaccumulation of these toxic and poisonous chemicals in the blood and/or body of Plaintiff.

114. Adequate instructions and warnings on the AFFF containing PFAS could have reduced or avoided these foreseeable risks of harm and injury to Plaintiff. If Defendants provided adequate warnings: (a) Plaintiff could have and would have taken measures to avoid or lessen his



exposure; and (b) end users and governments could have taken steps to reduce or prevent the release of PFASs into the blood and/or body of Plaintiff. Defendants' failure to warn was a direct and proximate cause of Plaintiff's injuries from PFAS that came from the use, storage, and disposal of AFFF containing PFAS. Crucially, Defendants' failure to provide adequate and sufficient warnings for the AFFF containing PFAS they manufactured, designed, marketed, distributed, and sold renders the AFFF a defective product.

115. Defendants were negligent in their failure to provide Plaintiff with adequate warnings or instruction that the use of their AFFF products would cause PFAS to be released into the blood and/or body of Plaintiff. As a result of Defendants' conduct and the resulting contamination, Plaintiff has suffered, and continues to suffer, severe personal injuries by exposure to AFFF containing PFAS.

116. Defendants' negligent failure to warn directly and proximately caused the harm to and damages suffered by Plaintiff.

**COUNT IV**  
**Design Defect**

117. Plaintiffs hereby incorporate by reference the allegations contained in the preceding paragraphs of this Complaint as if restated in full herein.

118. Defendants knew or should have known: (a) exposure to AFFF containing PFAS is hazardous to human health; (b) the manner in which AFFF containing PFAS was designed, manufactured, marketed, distributed, and sold was hazardous to human health; and (c) the manner in which AFFF containing PFAS was designed, manufactured, marketed, distributed, and could and would release PFAS into Plaintiff and cause the exposure and bioaccumulation of these toxic and poisonous chemicals in the blood and/or body of Plaintiff.

119. Knowing of the dangerous and hazardous properties of the AFFF containing

PFAS, Defendants could have designed, manufactured, marketed, distributed, and sold alternative designs or formulations of AFFF that did not contain hazardous, toxic, and poisonous PFAS. These alternative designs and formulations were already available, practical, and technologically feasible. The use of these alternative designs would have reduced or prevented the reasonably foreseeable harm to Plaintiff caused by the Defendants' manufacture, marketing, distribution, and sale of AFFF containing hazardous, toxic, and poisonous PFAS.

120. The AFFF containing PFAS that was designed, manufactured, marketed, distributed, and sold by the Defendants was so hazardous, toxic, poisonous, and dangerous to human health that the act of designing, formulating, manufacturing, marketing, distributing, and selling this AFFF was unreasonably dangerous under the circumstances.

121. The AFFF designed, formulated, manufactured, marketed, distributed, and sold by Defendants was defectively designed and the foreseeable risk of harm could and would have been reduced or eliminated by the adoption of a reasonable alternative design that was not unreasonably dangerous. Defendants' defective design and formulation of AFFF containing PFAS was a direct and proximate cause of the contamination of the blood and/or body of Plaintiff and the persistence and accumulation of PFAS in his blood and/or body.

122. Defendants' defective design and formulation of AFFF containing PFAS caused the contamination described herein resulting in a personal injuries to Plaintiff. As a direct result of the harm and injury caused by Defendants' defective design and the contamination described herein, Plaintiff has been exposed to AFFF containing PFAS and other toxic substances and has developed cancer.

123. Defendants' negligent failure to design a reasonably safe product directly and proximately caused the harm to and damages suffered by Plaintiff.

**COUNT V**  
**Loss of Consortium**

124. Plaintiffs hereby incorporate by reference the allegations contained in the preceding paragraphs of this Complaint as if restated in full herein.

125. Plaintiff Carolyn Manuel is, and at all relevant times has been, the spouse of Orrel manuel and, as such, is entitled to the services, society and companionship of his spouse.

126. As a result of Defendant's fault, Plaintiff Carolyn Manuel was and will continue to be deprived of the comfort and enjoyment of the services and society of her spouse, has suffered and will continue to suffer economic loss, and has otherwise been emotionally and economically injured. Her injuries are permanent and will continue into the future.

127. Therefore, Plaintiff Carolyn Manuel asserts a cause of action for loss of consortium.

**COUNT VII**  
**Punitive Damages**

128. Plaintiffs hereby incorporate by reference the allegations contained in the preceding paragraphs of this Complaint as if restated in full herein.

129. Upon information and belief, Defendants engaged in willful, wanton, malicious, and or/reckless conduct that was done without regard to the consequences or the safety of Plaintiff and caused the foregoing injuries upon Plaintiff, disregarding his protected rights.

130. Defendants' willful, wanton, malicious, and/or reckless conduct includes but is not limited to Defendants' failure to take all reasonable measures to ensure Plaintiff was not exposed to PFAS which Defendants knew were linked to serious medical conditions.

131. Defendants have caused significant harm to Plaintiff and have demonstrated a conscious and outrageous disregard for their safety with implied malice, warranting the imposition of punitive damages.

### **PRAYER FOR RELIEF**

WHEREFORE, Plaintiffs request the Court enter judgment against the Defendants on each of the above-referenced claims as follows:

- (a) Finding Defendants jointly, severally and solidarily liable for past, present and future damages suffered by Plaintiffs;
- (b) Awarding compensatory damages in excess of the jurisdictional amount, including, but not limited to pain, suffering, emotional distress, loss of enjoyment of life, and other non-economic damages in an amount to be determined at trial of this action;
- (c) Awarding economic damages in the form of medical expenses, out of pocket expenses, lost earnings and other economic damages in an amount to be determine at trial of this action;
- (d) Punitive and/or exemplary damages for the wanton, willful, fraudulent, reckless acts of the Defendants who demonstrated a complete disregard and reckless indifference for the safety and welfare of the general public and to the Plaintiff in an amount sufficient to punish Defendants and deter future similar conduct;an order finding Defendants liable for conspiracy in the manner described herein;
- (e) Prejudgment interest;
- (f) Postjudgment interest;
- (g) Awarding Plaintiffs reasonable attorneys' fees when applicable;
- (h) Awarding Plaintiffs the costs of these proceedings; and
- (i) Such other and further relief as this Court deems just and proper.

### **DEMAND FOR JURY TRIAL**

Plaintiffs hereby demand trial by jury as to all issues.

Dated: January 23, 2019

Respectfully submitted,

s/ Merritt E. Cunningham

Michael G. Stag (LA Bar 23314)

Merritt Cunningham (LA Bar 32843)

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